

FIG. 1

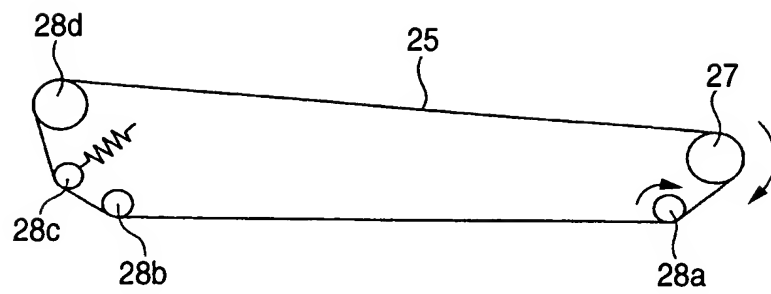


FIG. 2

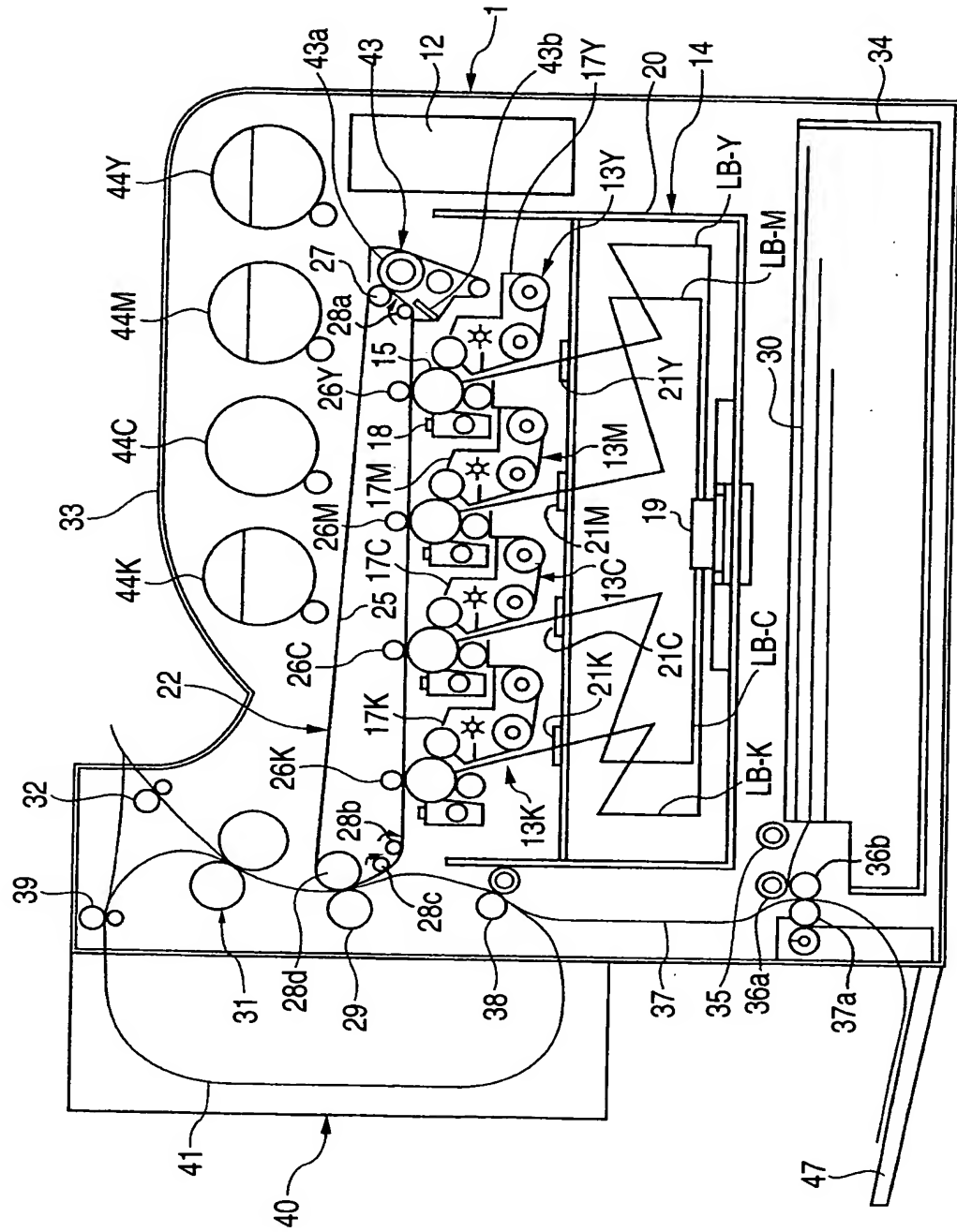


FIG. 3

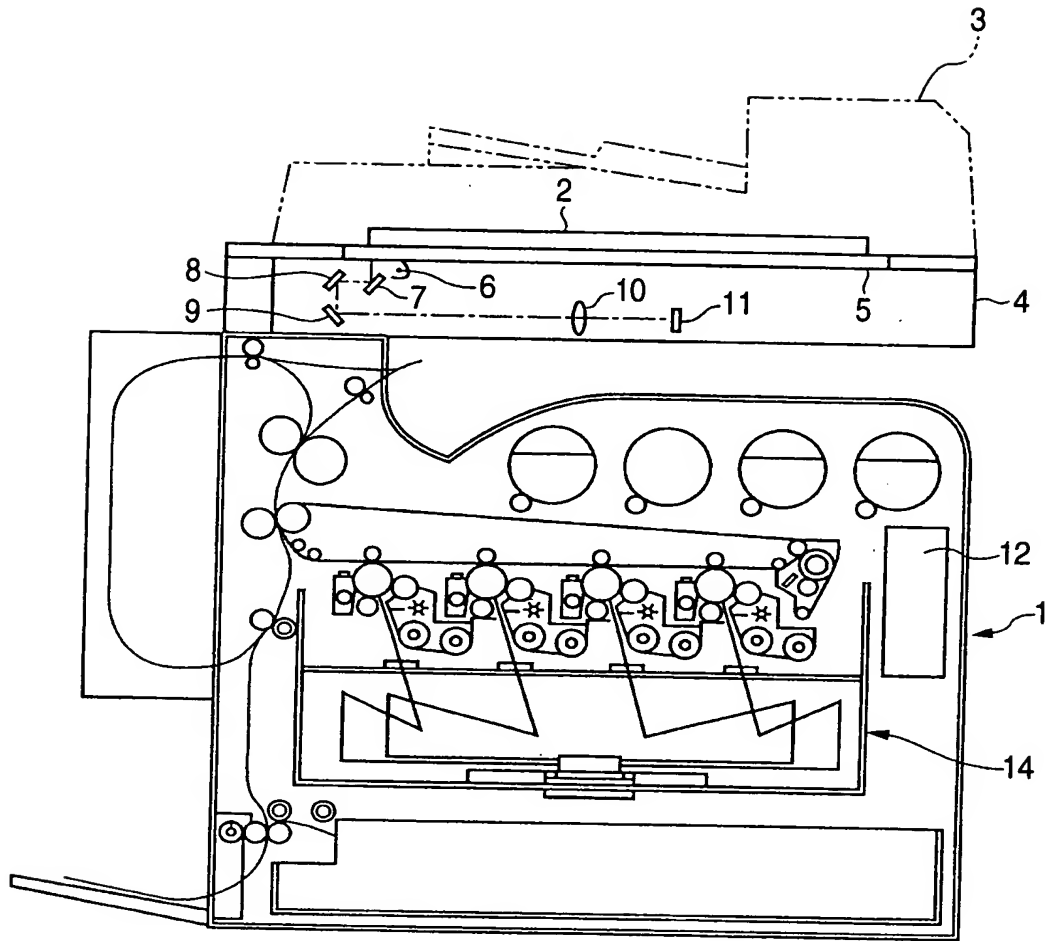


FIG. 4

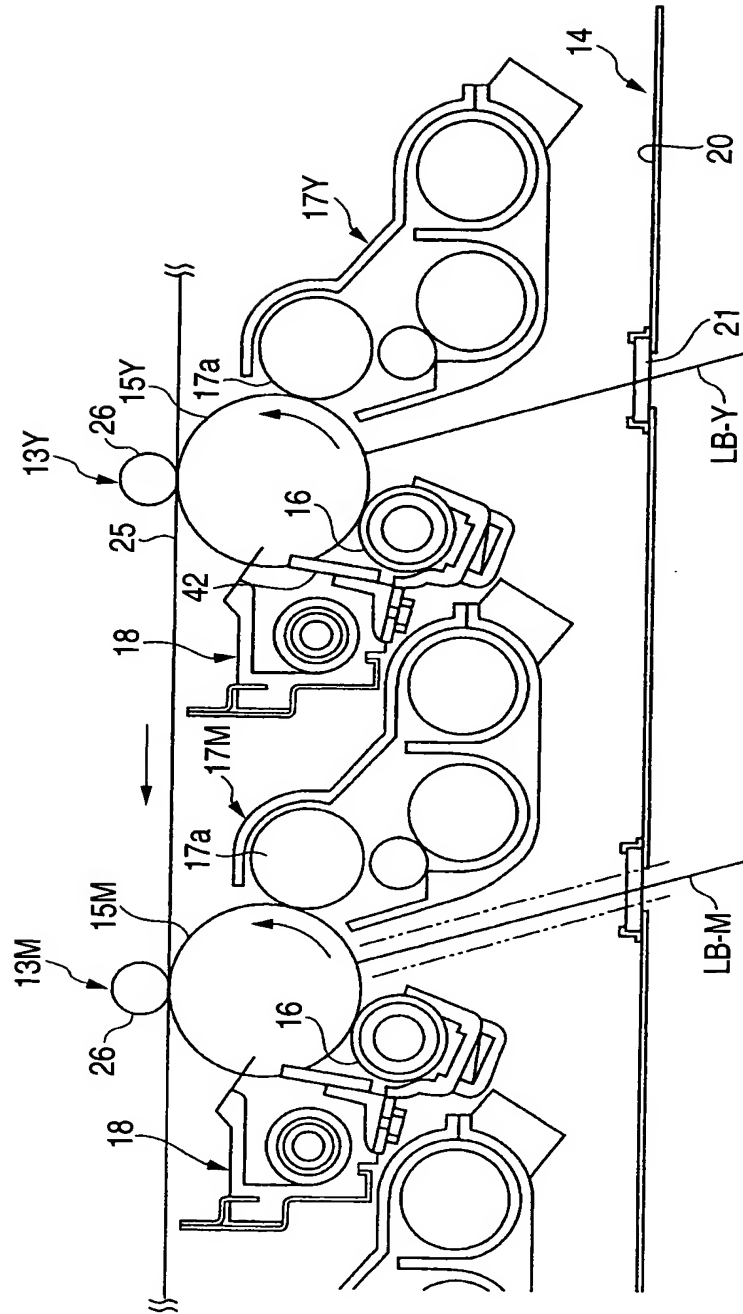


FIG. 5

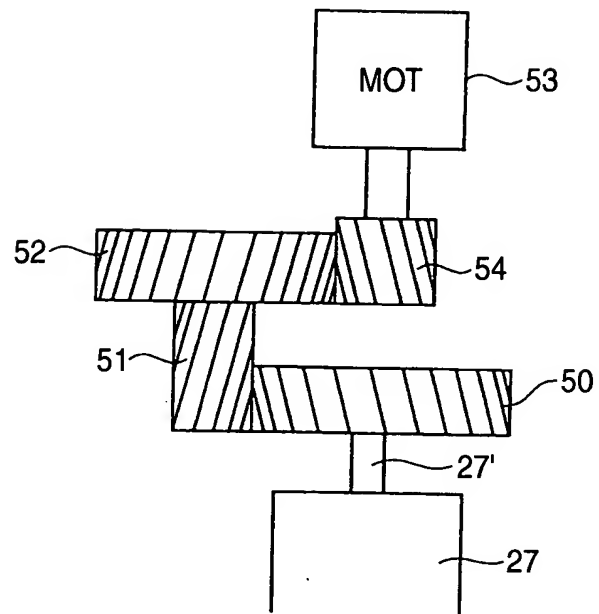


FIG. 6

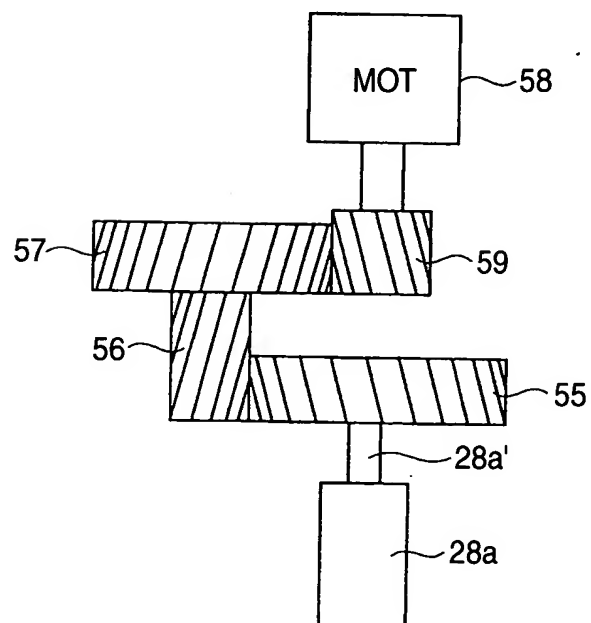


FIG. 7

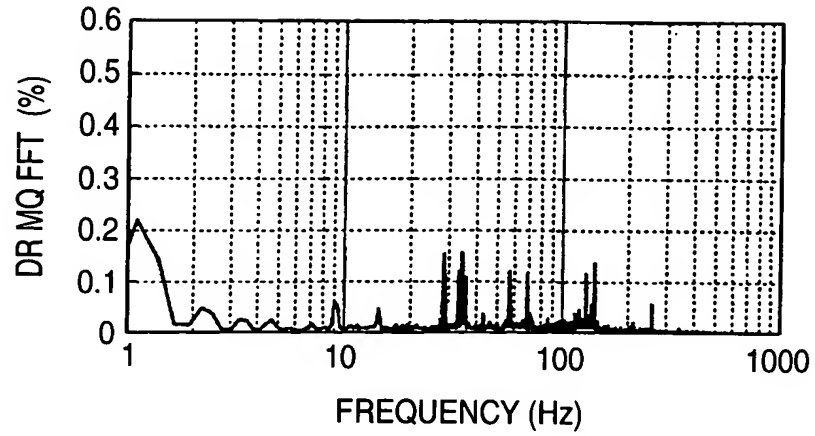


FIG. 8

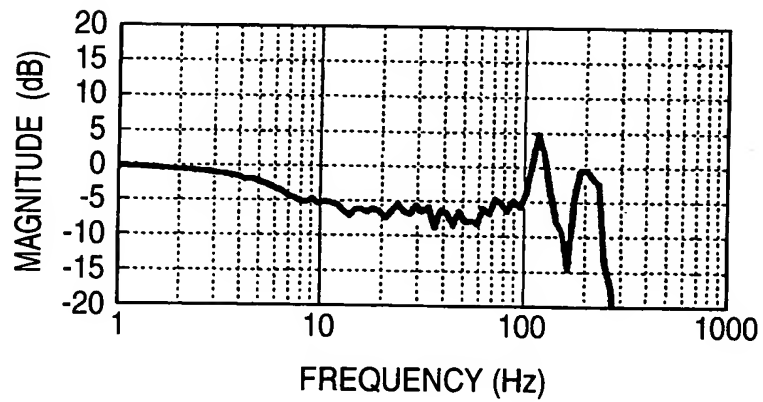


FIG. 9

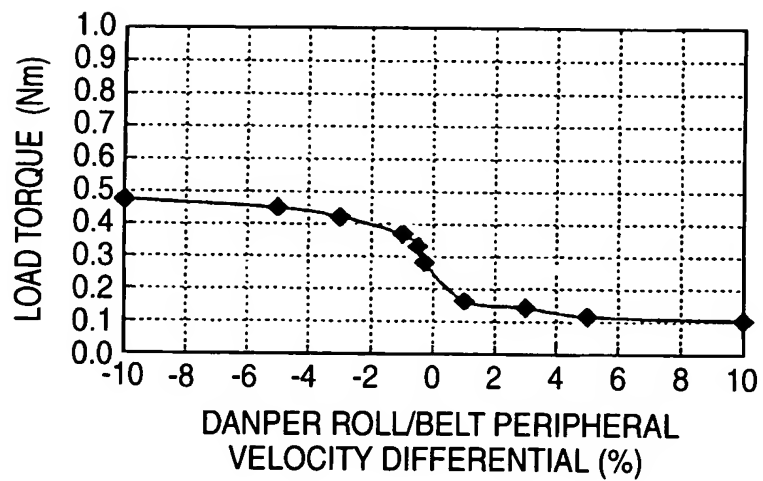


FIG. 10

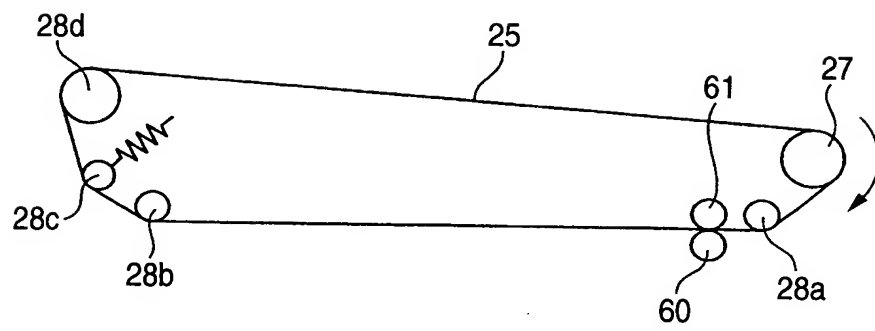
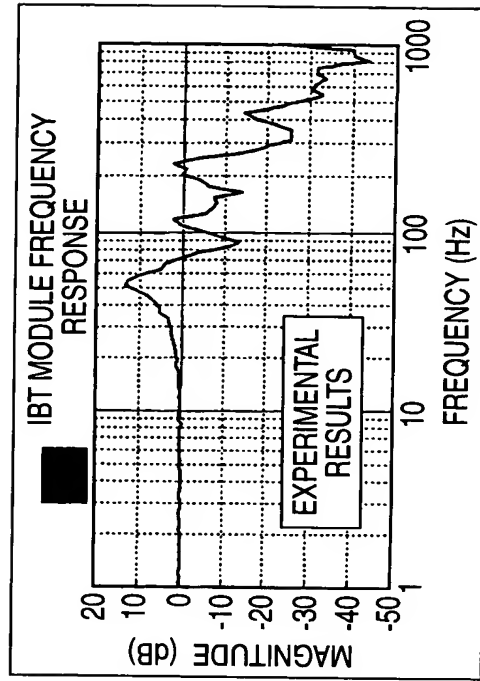
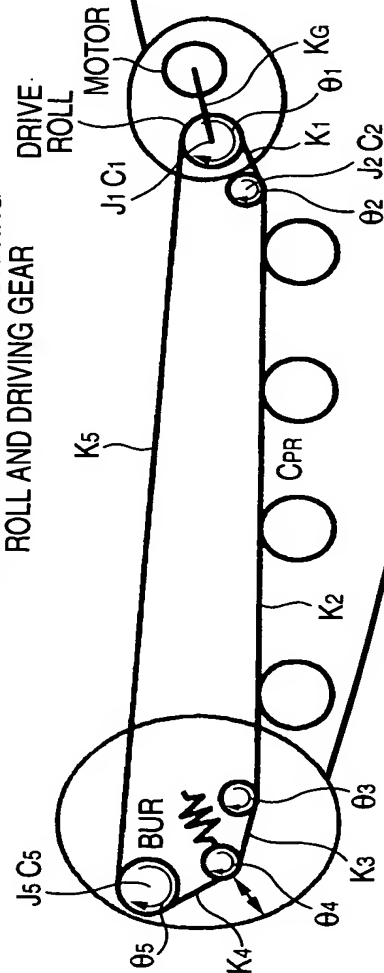


FIG. 11

$$\begin{aligned}
 J_1 \ddot{\theta}_1 &= K_G(\theta_0 - \theta_1) - K_1(r_1\theta_1 - r_2\theta_2)r_1 - K_5(r_1\theta_1 - r_5\theta_5)r_1 - C_1\dot{\theta}_1 \\
 J_2 \ddot{\theta}_2 &= K_1(r_1\theta_1 - r_2\theta_2)r_2 - K_2(r_2\theta_2 - r_3\theta_3)r_2 - C_2\dot{\theta}_2 - C_{PR}(r_2\theta_2 - r_3\dot{\theta}_3) \\
 J_3 \ddot{\theta}_3 &= K_2(r_2\theta_2 - r_3\theta_3)r_3 - K_3(r_3\theta_3 - r_4\theta_4)r_3 - C_3\dot{\theta}_3 - C_{PR}(r_3\dot{\theta}_3 - r_4\dot{\theta}_4) \\
 J_4 \ddot{\theta}_4 &= K_3(r_3\theta_3 - r_4\theta_4)r_4 - K_4(r_4\theta_4 - r_5\theta_5)r_4 - C_4\dot{\theta}_4 \\
 J_5 \ddot{\theta}_5 &= K_4(r_4\theta_4 - r_5\theta_5)r_5 - K_5(r_5\theta_5 - r_1\theta_1)r_5 - C_5\dot{\theta}_5
 \end{aligned}$$



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ROLL AND DRIVING GEAR



RESONANCE CAUSED BY INERTIA AROUND
BACKUP ROLL AND TENSION ROLL AND
SPRING NATURE OF BELT

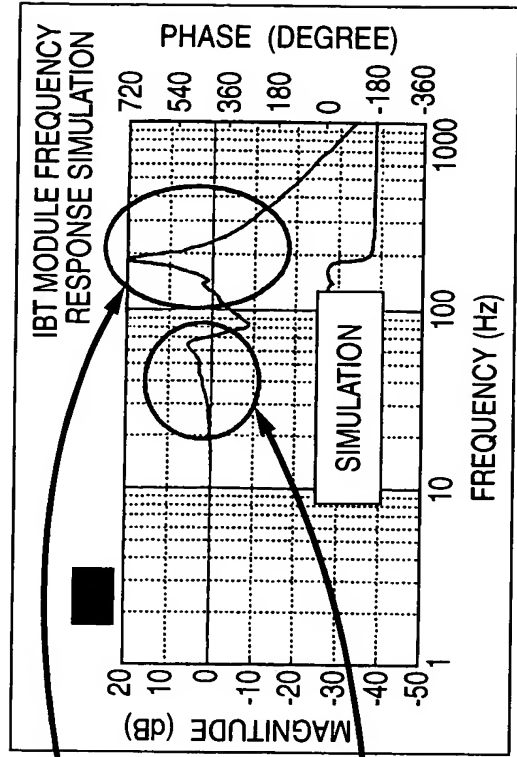


FIG. 12

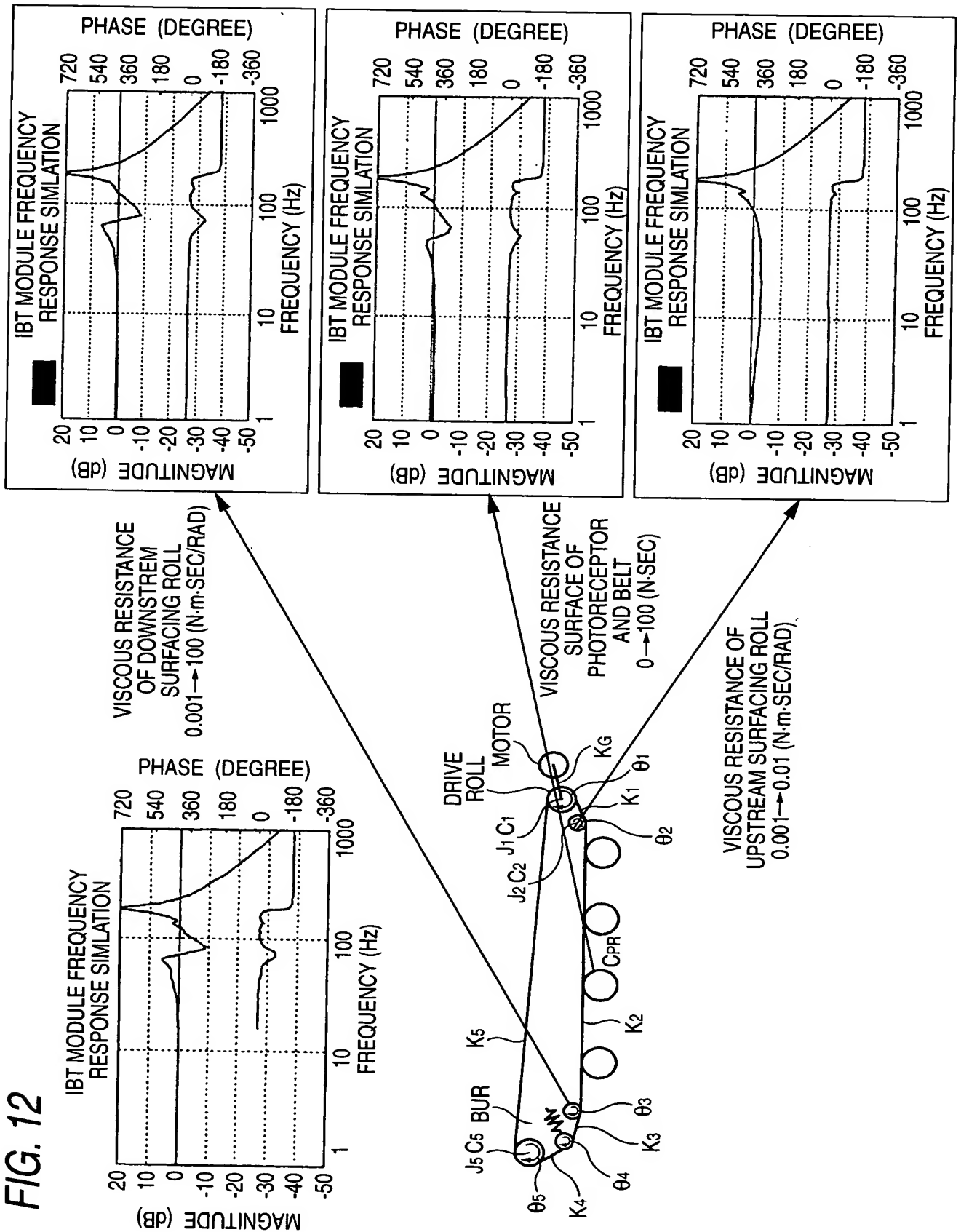


FIG. 13

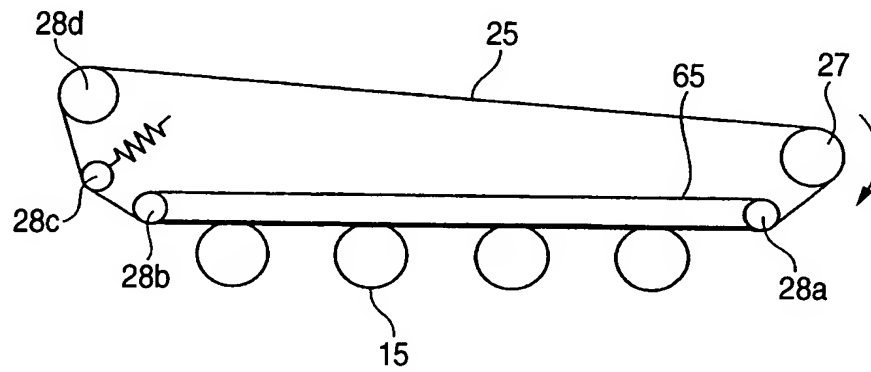


FIG. 14

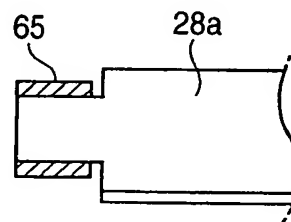


FIG. 15

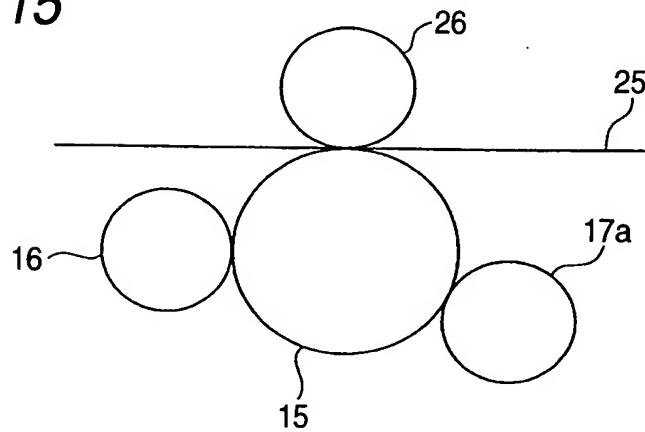


FIG. 16

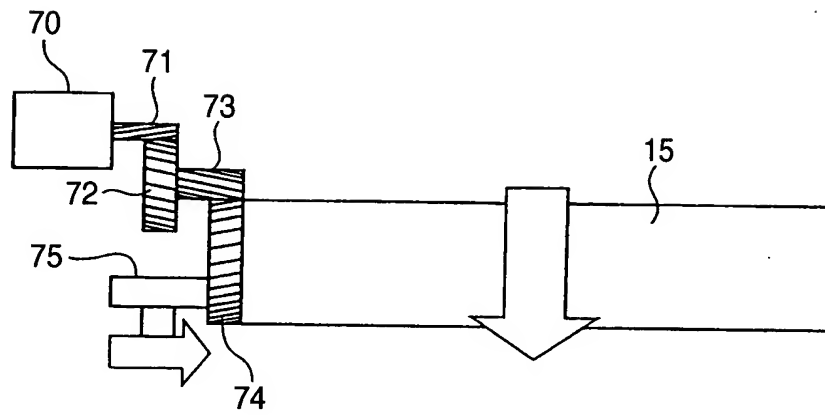


FIG. 17

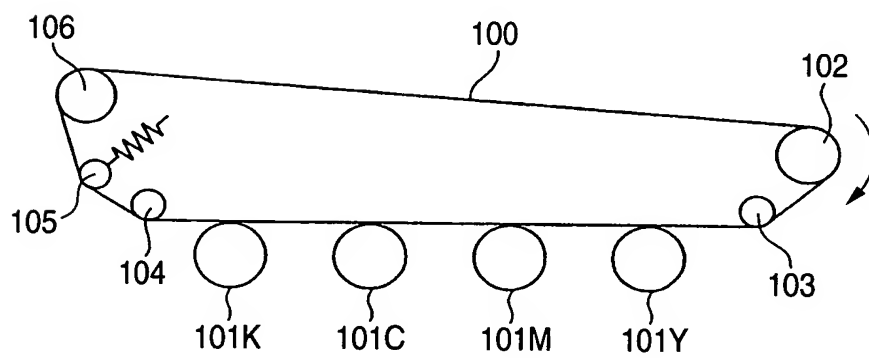
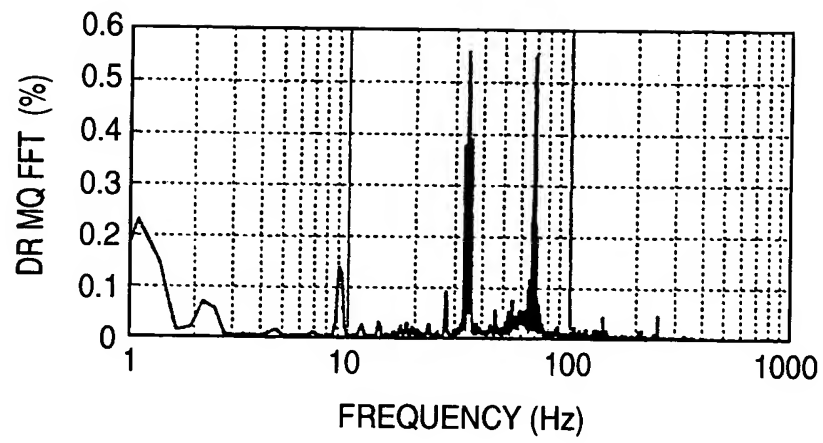


FIG. 18*FIG. 19*